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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Re application of: **Frampton E. ELLIS, III**

Serial No.: **09/527,019**

Group Art Unit: **3728**

Filed: **March 16, 2000**

Examiner: **Anthony Stashick**

For: **REMOVABLE ROUNDED MIDSOLE STRUCTURES AND  
CHAMBERS WITH COMPUTER CONTROLLED  
PROCESSOR-CONTROLLED VARIABLE PRESSURE**

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On July 2, 2002

*Iris C. Rousey*  
Iris Rousey

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**APPEAL BRIEF**

This is an appeal from the Final Rejection dated January 2, 2002. Appellant respectfully submits that the Final Rejection was made in error, and should be reversed for the reasons set forth below.

**I. The Real Party In Interest**

The real party of interest is Anatomic Research, Inc., to whom an undivided interest in U.S. Application no. 09/527,019 - *Removable Rounded Midsole Structures and Chambers with*

*Computer Controlled Processor-Controlled Variable Pressure* - has been assigned by virtue of an assignment recorded on December 4, 2000 at reel 011382, frame 0085.

## **II. Related Appeals And Interferences**

The Appellant and assignee are unaware of any pending appeals or interferences related to this appeal in U.S. Application No. 09/527,019 - *Removable Rounded Midsole Structures and Chambers with Computer Controlled Processor-Controlled Variable Pressure*. However, the Appellant intends to file an appeal in co-pending U.S. application no. 09/558,629 in the near future and this may be considered a related appeal since there is a double patenting rejecting in the present application over U.S. application no. 09/558,629.

## **III. The Status Of The Claims**

Claims 1-10 have been canceled without prejudice to resubmission.

Claims 11-44 are currently pending and stand rejected in a Final Office Action dated January 2, 2002. The rejection(s) of all of claims 11-44 are hereby appealed. A copy of the currently pending claims 11-44 is attached as an appendix hereto.

## **IV. The Status Of Any Amendments Filed After Final Rejection**

On April 2, 2002, the appellant filed an Amendment After Final Rejection in the above-identified application. This amendment was entered by the Examiner in an Advisory Action dated May 22, 2002. No other amendments were filed after the Final Rejection.

## **V. Summary Of The Invention**

In a first aspect, as claimed in independent claim 11, the present invention relates to an inner shoe that forms part of an outer shoe and that is removable from the outer shoe such that the inner shoe can be worn independently of the outer shoe. The inner shoe includes a removable midsole section sized to fit inside and form part of the sole of an outer shoe that is designed to receive and retain the removable midsole section. The inner shoe also includes a secondary outer

sole on at least a portion of the outer surface of the removable midsole section to provide traction or wear resistance when the inner shoe is worn without the outer shoe. The inner shoe also includes a device associated with the removable midsole section for retaining the inner shoe on an intended wearer's foot when worn without the outer shoe. Additional features of this aspect of the invention are claimed in claims 12-22.

In a second aspect, as claimed in claim 23, the present invention relates to a shoe comprising a shoe upper and a shoe sole including at least a bottom sole. An inner shoe as claimed in claim 11 forms at least a portion of the shoe sole. At least a portion of the side of the shoe upper is attached directly to the bottom sole such that the shoe upper abuts at least a portion of the outer surface of the inner shoe when the inner shoe is inserted in the shoe. The inner shoe is removable from the shoe and insertable in the shoe through an opening in the shoe upper provided for entry and exit of the intended wearer's foot into and out of the shoe. Additional features of this aspect of the invention are claimed in claim 24

In a third aspect, as claimed in independent claim 25, the present invention relates to a removable midsole section, sized to fit inside a shoe and form part of a shoe designed to receive and retain the removable midsole section. The removable midsole section is removable from the shoe. The removable midsole section is defined by an inner surface and an outer surface and has a lateral side, a medial side and a middle portion located between the lateral and medial sides. The removable midsole section also includes a plurality of protrusions on at least one side of the removable midsole section that interact with the shoe to retain the removable midsole section in the shoe. At least a portion of the outer surface of each protrusion is concavely rounded relative to an inner section of the removable midsole section adjacent to the concavely rounded outer surface portion, as viewed in a frontal plane cross-section when the removable midsole section is upright and in an unloaded condition. At least one portion of an inner surface of a side of the removable midsole section is convexly rounded relative to a section of the removable midsole section directly adjacent to the convexly rounded inner surface portion, as viewed in a frontal plane cross-section when the removable midsole section is upright and in an unloaded condition. Additional features of this aspect of the invention are claimed in claims 26-31.

In a fourth aspect, as claimed in claim 32, the present invention relates to a shoe comprising a shoe upper and a shoe sole including at least a bottom sole. An inner shoe as claimed in claim 25 forms at least a portion of the shoe sole. At least a portion of the side of the shoe upper is attached directly to the bottom sole such that the shoe upper abuts at least a portion of the outer surface of the inner shoe when the inner shoe is inserted in the shoe. The inner shoe is removable from the shoe and insertable in the shoe through an opening in the shoe upper provided for entry and exit of the intended wearer's foot into and out of the shoe. Additional features of this aspect of the invention are claimed in claims 33-38.

In a fifth aspect, as claimed in independent claim 39, the present invention relates to a shoe for receiving a removable midsole section. The shoe includes a shoe upper and a shoe sole including at least a bottom sole. At least a portion of the side of the shoe upper is attached directly to the bottom sole such that the shoe upper abuts at least a portion of the outer surface of the removable midsole section when the removable midsole section is inserted into the shoe. The removable midsole section is removable from the shoe and insertable in the shoe through an opening in the shoe upper provided for entry and exit of the intended wearer's foot into and out of the shoe. The shoe also includes at least two recesses in the bottom sole to thereby releasably retain the removable midsole section in the shoe. Additional features of this aspect of the invention are claimed in claims 40-44.

The inner shoe has several additional characteristics including: (1) at least one computer controlled compartment located in an upper portion of the removable midsole section; (2) from a frontal cross-sectional view, at least a portion of the outer surface of a side of the removable midsole is concavely rounded relative to the corresponding inner section of the removable midsole; (3) from a frontal cross-sectional view, at least a portion of the inner surface of a side of the removable midsole is convexly rounded relative to the corresponding outer section of the removable midsole; (4) the thickness of the concavely rounded sides taper when viewed from a horizontal plane; (5) the concavely rounded portions form a plurality of protrusions, in between which one or more indentations can occur; (6) one or more of these protrusions are located at one of the following parts of an intended wearer's foot: a base of a calcaneus, a lateral tuberosity of

the calcaneus, a head of a first distal phalange, a longitudinal arch, a head of a first metatarsal, a head of a fifth metatarsal, and a base of the fifth metatarsal. Moreover, when the inner shoe is inserted into the receiving shoe, at least a portion of the side of the shoe upper attaches to directly to the bottom sole such that the shoe upper abuts at least a portion of the outer surface of the inner shoe.

The bottom sole of the receiving shoe may also have a plurality of tapering protrusions which are concavely rounded relative to an adjacent concavely rounded inner section, as viewed from a frontal cross sectional plane. These protrusions are positioned to correspond to one of the following parts of an intended wearer's foot: a base of a calcaneus, a lateral tuberosity of the calcaneus, a head of a first distal phalange, a longitudinal arch, a head of a first metatarsal, a head of a fifth metatarsal, and a base of the fifth metatarsal.

## **VI. Issues On Appeal**

Appellant believes that the various issues to be considered on appeal may be concisely summarized as follows:

**Issue 1:** Whether Claims 11-44 are unpatentable under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention.

**Issue 2:** Whether Claims 11 and 20-22 are unpatentable under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,706,316 (Tanzi).

**Issue 3:** Whether Claims 25-44 are unpatentable under 35 U.S.C. § 102(b) as being anticipated by WO 97/46127 (Adidas AG).

**Issue 4:** Whether Claims 12 and 13 are unpatentable under 35 U.S.C. § 103(a) over Tanzi in view of U.S. Patent Application 5,813,142 (Demon).

**Issue 5:** Whether Claims 14-20 and 23-24 are unpatentable under 35 U.S.C. § 103(a) over Tanzi in view of Adidas AG.

**Issue 6:** Whether Claims 11-44 are unpatentable under 35 U. S.C. § 101 as claiming the same invention as co-pending U.S. Application No. 09/558,629.

At the time of filing of this appeal brief, applicant intends to file a petition to contest the drawing objection under 37 C.F.R. §1.83(a) which was maintained by the Examiner in the Advisory Action dated May 22, 2002.

**VII. Grouping Of Claims**

Group I – Claims 11 and 21-22

Group II – Claim 20

Group III – Claims 25-44

Group IV – Claims 12-13

Group V – Claims 14-20 and 23-24

**VIII. Argument -- The Rejection And Appellant's Response.**

***Issue 1: Whether claims 11-44 are unpatentable under 35 U.S.C. §112, second paragraph, as being indefinite and failing to clearly claim the subject matter of the invention.***

The Examiner has rejected claims 11-44 under 35 U.S.C. §112, second paragraph, as being indefinite and failing to particularly point out and distinctly claim the subject matter of the invention. Specifically, the Examiner has objected to the use of the term "non-orthotic" in the claims of the present application. This rejection should be reversed since the entry of the Amendment After Final Rejection filed on April 2, 2002 by the Advisory Action dated May 22, 2002 removed all instances of the term "non-orthotic" from the claims of the application. Thus, the term "non-orthotic" no longer appears in any of claims 11-44 of the present application. Therefore, this rejection should be reversed.

The Appellant respectfully requests that the rejection of Claims 11-44 under 35 U.S.C. §112, second paragraph, be overturned for the aforementioned reason.

***Issue 2: Whether Claims 11 and 20-22 are unpatentable under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,706,316 (Tanzi).***

**A. The Rejection**

Claims 11 and 20-22 have been rejected by the Examiner under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,706,316 (Tanzi). Specifically, the Examiner stated,

“Tanzi ‘316 discloses all the limitations of the claims including the following: a removable midsole portion 12 sized to fit inside and form part of the sole of a shoe (the sole of the shoe being 18, 14, 12); a secondary outer sole 14 on at least a portion of the midsole (14 can provide traction by itself or can also have attachments to it that could provide traction. The providing traction [sic] is function language and is given little patentable weight since the structure of an outer sole is present in the reference); a device (upper 10 to which 12 and 14 are fastened) associated with the midsole for retaining the midsole on the user’s foot when the midsole is not placed within the receiving shoe; an insole (that sole of the upper 10 located on top of 12); the device 32 being an upper (as it is located above the sole and attaches to the upper portion of the user’s foot.”

**C. Group I - Claims 11 and 21-22**

The Appellant disagrees with the Examiner's characterization of the invention in Tanzi. Tanzi relates to a method for assembling a shoe in which adjoining parts of the shoe are permanently attached to each other through some type of permanent bonding process such as heat-activated gluing. See col. 7, lines 10-30 of Tanzi. According to Tanzi, this method represents an improvement over other existing methods of permanently attaching the parts of a

shoe together, such as sewing. (See Tanzi, Col. 1, lines 46-50 and col. 7, lines 48-60). Neither the description nor the claims of Tanzi anywhere mention any removable part of the shoe, let alone a removable midsole section as claimed in any of claims 11 and 20-22.

While it is true that an adhesive bond created between two materials such as that created by the heat-activated gluing process of Tanzi, can be broken under certain conditions (i.e. the use of a solvent, the application of extreme force, etc.), the shoe of Tanzi would be destroyed by removing the midsole and shank portions 12,14 as the examiner suggests. Glues that are heat-activated, such as those referenced by Tanzi, are designed to be used for a single application. After being melted once they do not regain their original chemical structure or physical properties. A simple analogy is the fact that you cannot un-fry an egg. With respect to the shoe as taught by Tanzi, any attempt to separate the midsole 12 and shank 14 from the rest of the shoe would permanently destroy the structure of the shoe disclosed in Tanzi and would render both the shoe and the midsole 12 and shank 14 unsuitable for their intended purpose since the bond formed by the heat-activated glue would be permanently destroyed. If Tanzi truly intended the midsole 12 and shank 14 to be removable, Tanzi would not have taught the skilled person to employ heat-activated glue to fasten the midsole 12 and shank 14 to the upper 16.

In contrast to Tanzi, the present invention, as claimed in claim 11, requires an inner shoe, which is removable from the outer shoe for the purpose of wearing the inner shoe separately from the outer shoe. As such, the inner shoe can be inserted, removed, and re-inserted to accommodate the needs of the user. See e.g. page 59, lines 14-20 of the original specification. This is clearly different from the shoe disclosed in Tanzi where the midsole 12 and shank 14 are

permanently attached to the shoe upper.

The midsole is attached to the sole through one or a plurality of means, including, but not limited to, mechanical fasteners, snap fittings, adhesives, etc. It should be noted that a key property for each of these methods of attachment is releasability. That is, the method of attachment must not only hold the midsole and shoe together, but also allow the midsole and shoe to be separated without destroying either component. For example, if an adhesive were used as the method of attachment, the bonding capacity of the glue must be "tacky" (similar to the adhesive of a Post-It™ note) so that midsole may be readily secured and released without causing damage to the midsole or the shoe itself.

Therefore, Tanzi clearly does not disclose, either expressly or under principles of inherency, each and every element of the present invention, and thus, the present invention is not anticipated by it. *See RCA Corp. v Applied Digital Data Systems, Inc.*, 730 F.2d 1440, (Fed. Cir. 1984), *cert. dismd.*, 468 US 1228, (1984). The Appellant respectfully requests that the rejection of Claims 11 and 20-22 under 35 U.S.C. §102(b) with respect to Tanzi be overturned for the aforementioned reasons.

#### **C. Group II - Claim 20**

Claim 20 depends from claims 11, 14, 15, 16 and 17 and thus includes all of the limitations of claims 11, 14, 15, 16 and 17. The Examiner has not rejected any of claims 14-17 as being anticipated by Tanzi and thus this rejection of claim 20 is clearly an error since claim 20 requires all of the limitations of claims 14-17. In fact, the Examiner takes the position in section 9 of the

Final Rejection that Tanzi does not disclose the limitations of any of claim 14-17, instead relying on WO 97/4612 for these features. Thus for this reason alone, Tanzi cannot anticipate claim 20 of the present application.

Moreover, there is absolutely no indication in Tanzi that the thickness of the midsole tapers from a greater thickness to a lesser thickness, as viewed in a horizontal plane cross-section as is required by claim 17 and thus also by claim 20. This feature can be seen, for example, in Fig. 11L of the original specification which shows a horizontal plane cross-sectional view of a preferred removable midsole section 145. In this figure it can be seen that the concavely rounded portions 95b, 95c, 97, 96d and 96e all have a thickness which tapers to a lesser thickness as viewed in this horizontal plane cross-section.

Accordingly, for the reasons given above with respect to claim 11 and for these additional reasons, claim 20 is not anticipated by Tanzi and this rejection should be reversed.

***Issue 3: Whether Claims 25-44 are unpatentable under 35 U.S.C. §102(b) as being anticipated by WO 97/46127 (Adidas AG).***

**Group III – Claims 25-44**

Claims 25-44 have been rejected by the Examiner under 35 U.S.C. §102(b) as being anticipated by “International reference no. WO 97/4612.” As there is no international publication number corresponding to “WO 97/4612”, the Appellant presumes that the Examiner intended to reference International Publication no. WO 97/46127 (hereinafter “Adidas AG”).

The Adidas AG invention is a method for permanently assembling a shoe outer sole,

midsole, upper, and toe piece. Despite the similarities between certain diagrams of Adidas AG and certain diagrams of the present application, Adidas AG does not teach or suggest a removable inner shoe or removable insert. Rather, Adidas AG teaches at page 12, lines 7-13 that,

"The outsole is then attached to the upper by a stitch 80 that weaves around the outer perimeter of the openings thereby connecting the upper 16 to the outsole flanges (e.g., flange 70 in Fig. 8) and the attachment surface 68 (in FIG. 6) of the outsole. In addition, an adhesive can be applied to the attachment surface and/or the interior receiving surface of the upper before the outsole is inserted into the upper to provide an additional bond between the upper and the outsole."

Also, Adidas AG states that,

"the midsole is then inserted into the interior cavity of the upper and affixed to the top side of the outsole ... An adhesive can be used on the bottom side of the midsole 12 to secure the midsole to the outsole. ... A last 82 is then inserted into the cavity of the upper in order to apply pressure to the midsole to strengthen the bond between the midsole and the outsole ..."

Clearly the outsole is permanently attached to the upper and the midsole 12 is permanently affixed to the outsole and thus is not removable. Thus, Adidas AG does not teach the inner shoe as claimed in the present claims since the midsole 12 of Adidas AG is permanently attached to the outsole and thus is not a removable midsole section.

"Anticipation" under 35 U.S.C. § 102(b) is established only when single prior art reference discloses, expressly or under principles of inherency, each and every element of claimed invention. *See RCA Corp., supra*. Because Adidas AG does not teach or suggest the removable feature of the midsole section of the present invention, it clearly cannot anticipate any of claims 25-44. Therefore, the Appellant respectfully requests that the rejection of Claims 25-44 under 35 U.S.C. §102(b) as being anticipated by Adidas AG be reversed.

*Issue 4: Whether Claims 12 and 13 are unpatentable under 35 U.S.C. §103(a) over Tanzi in view of U.S. Patent Application 5,813,142 (Demon).*

**A. The Rejection**

Claims 12 and 13 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Tanzi in view of U.S. Patent Application 5,813,142 ("Demon"). The Examiner takes the position that Tanzi discloses all of the limitations of claims 12-13 except for the compartment containing a fluid, a flow regulator, a duct, a control system that automatically adjusts the pressure in the compartment and a microcomputer. The Examiner relies on Demon as teaching the features that the Examiner admits are not taught by Tanzi.

**B. Group IV - Claims 12-13**

Claims 12-13 depend from claim 11. Tanzi does not teach the feature of claim 11 that the inner shoe must be removable from the outer shoe. Demon also does not teach this feature of claim 11. Accordingly, neither of the cited references teaches or suggests this feature of claims 12-13 and thus claims 12-13 are clearly patentable over a combination of Tanzi and Demon for at least this reason.

In addition, the present invention represents a non-obvious improvement over Tanzi in view of Demon with respect to the location of the controller. Demon teaches that the controller 300 should be situated in the shoe's upper (see Figure 1) where it is exposed to the torsion created by the wearer during use. In the present invention, the controller is located within the

removable midsole section. Positioning the controller in the removable midsole section greatly reduces the torsion problems associated with the situating the controller in the shoe upper. Also, if the midsole section of Demon were made removable as the examiner suggests, it would be necessary to disconnect the controller prior to removing the midsole section since the controller 300 of Demon is located in the shoe upper.

Also, the controller in Demon is designed only to regulate the ambient air entering into and exiting from bladders located in the non-removable shoe sole. Therefore, one would have to modify the controller as taught in Demon to function in two different platforms: the removable midsole worn independently of the other parts of the shoe and the removable midsole worn as part of the complete shoe, in order to arrive at the present invention. There is no teaching or suggestion in either Tanzi or Demon to do so.

Finally, the Examiner takes the position that it would be obvious to provide the shoe midsole of Tanzi with the system of Demon to reduce the impact of the user's foot on the traveling surface during use. However, the Examiner neglects to consider two important features of the system of Demon which would lead a skilled person away from combining the system of Demon with the shoe of Tanzi.

First, the system of Demon is spread out over both the shoe sole and the shoe upper as shown in Fig. 1 of Demon. This would make the shoe construction method of Tanzi impractical since the controller of Demon would reside in the upper 18 of Tanzi and other elements of the system of Demon would reside in the midsole portion 12 of Tanzi. As a result, there must be a connection between the control system in the upper 18 and the other elements in the midsole

portion 12. This will make the shoe construction method of Tanzi impractical since the shoe construction method of Tanzi employs a midsole 12 that is a single integral piece that is separate from the upper 18. See e.g. col. 3, lines 58-62 and col. 4, lines 25-29 of Tanzi.

The present invention, therefore, clearly represents a non-obvious advancement in the art over Tanzi in view of Demon. Accordingly, the Appellant respectfully requests that the rejection of Claims 12 and 13 under 35 U.S.C. §103(a) as being unpatentable over Tanzi in view of Demon be reversed.

***Issue 5: Whether Claims 14-20 and 23-24 are unpatentable under 35 U.S.C. §103(a) over Tanzi in view of Adidas AG.***

**Group V – Claims 14-20 and 23-24**

Claims 14-20 and 23-24 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Tanzi as applied to claim r1<sup>1</sup> in view of WO 97/46127 (Adidas AG).<sup>2</sup> The Examiner first asserts that Tanzi discloses all of the limitations of claims 14-20 except for the limitations with respect to the protrusions and the concave and convex portions. The Appellant respectfully disagrees with this assertion for the reasons previously stated with respect to claim 11, namely, that both Tanzi and Adidas AG teach methods of permanently bonding parts of the shoe together, whereas the present invention claims a *removable* midsole insert. Accordingly, since all of claims 14-20 and 23-24 depend from claim 11, the rejection of these claims over

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<sup>1</sup> In light of the Examiner's argument, the Appellant presumes that the Examiner intended to reference Claim 11 instead of his actual reference to Claim 41.

<sup>2</sup> The Examiner has again used the invalid reference number "WO 97/4612". The Appellant presumes that this is a typographical error and the Examiner intended to refer to WO 97/46127 (Adidas AG).

Tanzi in view of Adidas AG<sup>3</sup> for at least this reason.

In addition, the Examiner asserts that it would have been obvious to place the protrusions as taught by Adidas AG on the midsole of Tanzi to aid in releasably fastening the midsole of Tanzi to the sole as taught by Adidas AG. The Appellant disagrees with this conclusion for at least two reasons. First, unless Tanzi includes an outsole that is specially adapted to receive the protrusions on the midsole as is the outsole 14 of Adidas AG, the placement of protrusions on the midsole of Tanzi will not aid in fastening the midsole of Tanzi to the sole as the Examiner suggests. The Examiner has provided no teaching, suggestion or motivation to provide such a specialized outsole in the shoe of Tanzi. Moreover, due to the nature of the Tanzi shoe, even if such a specialized outsole 14 such as that of Adidas AG were provided, this would not help since the midsole 12 of Tanzi would require special adaptation of the upper 16 since it is the upper 16 of Tanzi that abuts the sides of the midsole 12 where such protrusions would be located when the shoe sole is assembled as shown in Fig. 1 of Tanzi. The Examiner has provided no motivation for the skilled person to modify the upper of Tanzi to provide a structure specially adapted to receive the protrusions on the midsole taught by Adidas AG.

Secondly, the outsole 18 of Tanzi is outside of the upper 16 as shown in Fig. 1. Thus, the outsole 18 of Tanzi is not in contact with the midsole 12 at all. This is completely different from Adidas AG where the inner surface of the outsole 14 abuts with the outer surface of the midsole 12. Thus, to employ the structure of Adidas AG, the skilled person would also have to reverse the positions of the outsole 18 and upper 16 of Tanzi. It is not clear how this should be done while still maintaining a traction surface on the bottom of the shoe. Also, this would

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<sup>3</sup> See the discussion of Adidas AG under Issue 4.

conflict with the teachings of Tanzi at col. 6, lines 27-36 that the sole component must be in a form suitable for attachment to the bottom surface of the upper (or liner) 16. Thus, the skilled person would not be motivated to combine the teachings of Adidas AG with Tanzi as the Examiner suggests.

The Appellant therefore respectfully requests that the rejection of Claims 14-20 and 23-24 under 35 U.S.C. §103(a) over Tanzi in view of Adidas AG be overturned.

***Issue 6: Whether Claims 11-44 are unpatentable under 35 U. S.C. §101 as claiming the same invention as co-pending U.S. Application No. 09/558,629.***

The Examiner has provisionally rejected Claims 11-44 under 35 U. S.C. §101 as claiming the same invention as co-pending U.S. Application No. 09/558,629 (Statutory Same-Invention Type Double Patenting). In support of this rejection, the Examiner has concluded that there is no difference between the terms "orthotic" and "non-orthotic".

The Appellant has amended the claims of the present application to remove all reference to "non-orthotic." In copending U.S. Application No. 09/558,629 the Appellant is claiming an insertable midsole *orthotic*. In the specification of copending U.S. Application No. 09/558,629, the Appellant has defined the term "orthotic" in reference to midsoles as "corrective, therapeutic, prosthetic, or ... prescribed by health care professionals." (*See e.g.* page 1, lines 13-16, of the original specification of U.S. Application No. 09/558,629). The American Heritage Dictionary, 3d, defines the term "orthotic" as "the science that deals with the use of specialized mechanical devices to support or supplement *weakened or abnormal* joints or limbs" (emphasis added).

In contrast, the Examiner has concluded that the term "orthotic" is defined as "anything that gives support to the foot." The Examiner provides no evidence in support of this conclusion, however, and thus the Board should rule in favor of the Appellant's definition since the applicant can be his own lexicographer and because the Appellant has provided evidence in support of its position. The Examiner also states that the term "non-orthotic" lacks clarity although he offers no evidence in support of this allegation. It is the Examiner's definition that is, in fact, vague, overly broad, and is not substantiated by a citation to a specific reference.

Although the term "orthotic" is a functional limitation, the Appellant emphasizes that it necessarily results in a *structural difference* in the claimed apparatus since an "orthotic" device must have structure designed specifically to support or supplement *weakened* or *abnormal* joints or limbs. In contrast, the claims of the present application are broader in scope in that they include any device including devices having structure to support or supplement the *normal, healthy* foot.

The Examiner has required the Appellant to either cancel the conflicting claims from all but one application *or* maintain a clear line of demarcation between the two applications. The Appellant has fully complied with the latter by manifestly distinguishing the present application from copending Application No. 09/558,629 by claiming a removable midsole in the former and an insertable midsole *orthotic* in the latter.

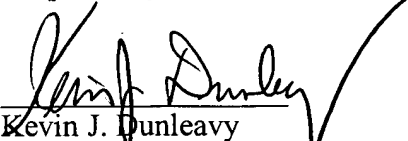
Moreover, the Appellant notes that this rejection should only be made by the Examiner "should be used when the conflicting claims are identical or conceded by applicant to be not patentably distinct." *See* MPEP §822. In fact, in justifying his rejection, the Examiner has cited

*In re Vogel*, 422 F.2d 438 (CCPA 1970). It is readily apparent by comparing the claims of U.S. Application No. 09/558,629 with the claims of the present application that the two sets of claims are not "identical". Furthermore, the Appellant has never conceded that these two sets of claims are not patentably distinct. The court in *In re Vogel* clearly stated that the "same invention" requires "identical subject matter." *Id.* at 441. An "inner shoe" and an "insertable midsole orthotic" are clearly distinguishable for the reasons given above and, thus, the claims of the present application and the claims of U.S. Application No. 09/558,629 do not relate to identical subject matter. Therefore, the Appellant respectfully requests that the rejection of Claims 11-44 under 35 U.S.C. §101 be overturned.

#### IX. Conclusion

For the foregoing reasons, Appellant respectfully submits that each of the rejections should be reversed, that all claims be allowed. Such a decision is respectfully solicited.

Respectfully submitted,

  
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APPENDIX- CLAIMS ON APPEAL

11. An inner shoe which comprises:

a removable midsole section sized to fit inside and form part of the sole of a shoe designed to receive and retain said removable midsole section;

a secondary outer sole on at least a portion of the outer surface of the removable midsole section to provide traction or wear resistance when said inner shoe is worn without the shoe designed to receive and retain said removable midsole section;

a device associated with the removable midsole section for retaining the inner shoe on an intended wearer's foot when worn without the shoe designed to receive and retain the removable midsole section; and

wherein said inner shoe is removable from said shoe in order to wear said inner shoe independently of said shoe.

12. The inner shoe as claimed in claim 11, further comprising at least one computer controlled compartment, wherein the computer control for the computer controlled compartment is located in said inner shoe.

13. The inner shoe as claimed in claim 12, wherein the computer control is located in an upper portion of the removable midsole section.

14. The inner shoe as claimed in claim 11, wherein at least one portion of an outer surface of a side of the removable midsole section is concavely rounded relative to an inner section of the removable midsole section adjacent to the concavely rounded outer surface portion, as viewed in a frontal plane cross-section when the removable midsole section is upright and in an unloaded condition.

15. The inner shoe as claimed in claim 14, wherein at least one portion of an inner

surface of a side of the removable midsole section is convexly rounded relative to a section of the removable midsole section adjacent to the convexly rounded inner surface portion, as viewed in a frontal plane cross-section when the removable midsole section is upright and in an unloaded condition.

16. The inner shoe as claimed in claim 15, wherein each at least one convexly rounded inner surface portion and each at least one concavely rounded outer surface portion is located at a corresponding location on the removable midsole section to thereby form at least one concavely rounded side portion of the removable midsole section located between said convexly rounded inner surface portion and the concavely rounded outer surface portion, as viewed in a frontal plane cross-section when the removable midsole section is upright and in an unloaded condition, said concavity of each said concavely rounded side portion being determined relative to a portion of the removable midsole section which is adapted to receive the foot of an intended wearer; and said at least one concavely rounded side portion is located at a location on the removable midsole section which corresponds to the position of at least one of the following parts of an intended wearer's foot when inside the removable midsole section: a base of a calcaneus, a lateral tuberosity of the calcaneus, a head of a first distal phalange, a longitudinal arch, a head of a first metatarsal, a head of a fifth metatarsal, and a base of the fifth metatarsal.

17. The inner shoe as claimed in claim 16, wherein a thickness of the removable midsole section tapers from a greater thickness measured at said at least one concavely rounded side portion to a lesser thickness at a location on one side of said concavely rounded side portion, as viewed in a horizontal plane when the removable midsole section is upright and in an unloaded condition.

18. The inner shoe as claimed in claim 17, wherein said thickness of the removable midsole section tapers to a lesser thickness on both sides of said concavely rounded side portion, as viewed in a horizontal plane when the inner shoe is upright and in an unloaded condition.

19. The inner shoe as claimed in claim 16, comprising at least two concavely rounded side portions and an indentation located between said two concavely rounded side portions, as viewed in a horizontal plane when the removable midsole section is upright and in an unloaded condition.

20. The inner shoe as claimed in claim 17, wherein each said concavely rounded side portion further comprises a concavely rounded portion of the outer surface of the removable midsole section, as viewed in a horizontal plane when the removable midsole section is upright and in an unloaded condition, said concavity of the concavely rounded portion of the outer surface being determined relative to an inner section of the removable midsole section directly adjacent to the concavely rounded outer surface portion.

21. The inner shoe as claimed in claim 11, further comprising an insole.

22. The inner shoe as claimed in claim 11, wherein said device is an inner shoe upper.

23. An outer shoe comprising:  
an outer shoe upper and an outer shoe sole including at least a bottom sole;  
at least a portion of said shoe sole being formed by an inner shoe as claimed in claim 11 when said inner shoe is inserted into said outer shoe;  
at least a portion of the side of said outer shoe upper being attached directly to the bottom sole such that the shoe upper abuts at least a portion of the outer surface of the inner shoe when said inner shoe is inserted into the shoe; and  
wherein said inner shoe is removable from the shoe and insertable into said shoe through an opening in the outer shoe upper provided for entry and exit of an intended wearer's foot into and out of said shoe.

24. An outer shoe as claimed in claim 23, wherein said inner shoe is releasably secured to said shoe by a releasable securing structure selected from the group consisting of mechanical fasteners, a snap fit, interlocking geometries and combinations thereof.

25. A removable midsole section sized to fit inside a shoe and form part of the shoe designed to received and retain said removable midsole section, which comprises:

an inner surface and an outer surface which together define the removable midsole section having a lateral side, a medial side and a middle portion located between the lateral and medial sides;

a plurality of protrusions on at least one side of said removable midsole section that interact with the shoe to retain said removable midsole section in said shoe;

at least one portion of the outer surface of each said protrusion is concavely rounded relative to an inner section of the removable midsole section adjacent to the concavely rounded outer surface portion, as viewed in a frontal plane cross-section when the removable midsole section is upright and in an unloaded condition;

at least one portion of an inner surface of a side of the removable midsole section is convexly rounded relative to a section of the removable midsole section directly adjacent to the convexly rounded inner surface portion, as viewed in a frontal plane cross-section when the removable midsole section is upright and in an unloaded condition; and

wherein said removable midsole section is removable from said shoe.

26. The removable midsole section as claimed in claim 25, wherein said at least one said protrusion is located on the lateral side of the removable midsole section and another of said protrusions is located on the medial side of the removable midsole section.

27. The removable midsole section as claimed in claim 25, wherein each at least one convexly rounded inner surface portion and each at least one concavely rounded outer surface portion is located at a corresponding location on the removable midsole section to thereby form

at least one of said protrusions.

28. The removable midsole section as claimed in claim 27, wherein each said protrusion is located at a location on the removable midsole section which corresponds to the position of at least one of the following parts of an intended wearer's foot when inside the removable midsole section: a base of a calcaneus, a lateral tuberosity of the calcaneus, a head of a first distal phalange, a longitudinal arch, a head of a first metatarsal, a head of a fifth metatarsal, and a base of the fifth metatarsal.

29. The removable midsole section as claimed in claim 28, wherein a thickness of the removable midsole section tapers from a greater thickness measured at each said protrusion to a lesser thickness at a location on one side of each said protrusion, as viewed in a horizontal plane when the removable midsole section is upright and in an unloaded condition.

30. The removable midsole section as claimed in claim 29, wherein the thickness of the removable midsole section tapers to a lesser thickness on both sides of each said protrusion, as viewed in a horizontal plane when the removable midsole section is upright and in an unloaded condition.

31. The removable midsole section as claimed in claim 27, further comprising an indentation located between said two protrusions, as viewed in a horizontal plane when the removable midsole section is upright and in an unloaded condition.

32. An outer shoe comprising:  
an outer shoe upper and an outer shoe sole including at least a bottom sole;  
at least a portion of said outer shoe sole being formed by an removable midsole section as claimed in claim 25;

at least a portion of the side of said outer shoe upper being attached directly to the bottom sole such that the outer shoe upper abuts at least a portion of the outer surface of the removable midsole section when said removable midsole section is inserted into the shoe; and

wherein said removable midsole section is removable from the shoe and insertable into said shoe through an opening in the outer shoe upper provided for entry and exit of an intended wearer's foot into and out of said shoe.

33. An outer shoe as claimed in claim 32, wherein the at least two protrusions on the side of the removable midsole section are in abutting relationship with the bottom sole when the removable midsole section is inside the shoe, so that the protrusions occupy corresponding recesses in the bottom sole to thereby releasably retain said removable midsole section in said shoe.

34. An outer shoe as claimed in claim 33, wherein a thickness of the removable midsole section tapers from a greater thickness measured at one said protrusion to a lesser thickness at a location on one side of said protrusion, as viewed in a horizontal plane when the removable midsole section is upright and in an unloaded condition.

35. An outer shoe as claimed in claim 34, wherein at least one portion of the outer surface of a side of the removable midsole section is concavely rounded relative to an inner section of the removable midsole section adjacent to the concavely rounded outer surface portion, as viewed in a frontal plane cross-section when the removable midsole section is upright and in an unloaded condition.

36. An outer shoe as claimed in claim 35, wherein at least one portion of an inner surface of a side of the removable midsole section is convexly rounded relative to a section of the removable midsole section adjacent to the convexly rounded inner surface portion, as viewed in a frontal plane cross-section when the removable midsole section is upright and in an unloaded

condition.

37. An outer shoe as claimed in claim 36, wherein each at least one convexly rounded inner surface portion and each at least one concavely rounded outer surface portion is located at a corresponding location on the removable midsole section to thereby form at least one of said protrusions.

38. An outer shoe as claimed in claim 37, wherein each said protrusion is located at a location on the removable midsole section which corresponds to the position of at least one of the following parts of an intended wearer's foot when inside the removable midsole section: a base of a calcaneus, a lateral tuberosity of the calcaneus, a head of a first distal phalange, a longitudinal arch, a head of a first metatarsal, a head of a fifth metatarsal, and a base of the fifth metatarsal.

39. An outer shoe for receiving a removable midsole section which comprises:  
an outer shoe upper and an outer shoe sole including at least a bottom sole;  
at least a portion of the side of said outer shoe upper being attached directly to the bottom sole such that the outer shoe upper abuts at least a portion of the outer surface of the removable midsole section when said removable midsole section is inserted into the outer shoe;  
wherein said removable midsole section is removable from the outer shoe and insertable into said outer shoe through an opening in the shoe upper provided for entry and exit of an intended wearer's foot into and out of said outer shoe; and  
at least two recesses in the bottom sole to thereby releasably retain said removable midsole section in said outer shoe.

40. An outer shoe as claimed in claim 39, wherein the outer surface of the bottom sole further comprises a plurality of protrusions on at least one side of said bottom sole;

at least one portion of the outer surface of each said protrusion on said bottom sole is concavely rounded relative to an inner section of the bottom sole directly adjacent to the concavely rounded outer surface portion, as viewed in a frontal plane cross-section when the bottom sole is upright and in an unloaded condition; and

at least one portion of an inner surface of a side each said protrusion of said bottom sole is convexly rounded relative to a section of the bottom sole directly adjacent to the convexly rounded inner surface portion, as viewed in a frontal plane cross-section when the bottom sole is upright and in an unloaded condition.

41. An outer shoe as claimed in claim 40, wherein said at least one said protrusion is located on the lateral side of the bottom sole and another of said protrusions is located on the medial side of the bottom sole.

42. An outer shoe as claimed in claim 40, wherein each said protrusion is located at a location on the bottom sole which corresponds to the position of at least one of the following parts of an intended wearer's foot when inside the removable midsole section: a base of a calcaneus, a lateral tuberosity of the calcaneus, a head of a first distal phalange, a longitudinal arch, a head of a first metatarsal, a head of a fifth metatarsal, and a base of the fifth metatarsal.

43. An outer shoe as claimed in claim 42, wherein a thickness of the bottom sole tapers from a greater thickness measured at each said protrusion to a lesser thickness at a location on one side of each said protrusion, as viewed in a horizontal plane when the bottom sole is upright and in an unloaded condition.

44. An outer shoe as claimed in claim 43, wherein the thickness of the bottom sole tapers to a lesser thickness on both sides of each said protrusion, as viewed in a horizontal plane when the bottom sole is upright and in an unloaded condition.

AF/3#28



<b>TRANSMITTAL OF APPEAL BRIEF (Large Entity)</b>	Docket No. <b>ANAT-1015US2</b>
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In Re Application Of: **Frampton E. Ellis, III**

Serial No. <b>09/527,019</b>	Filing Date <b>3/16/00</b>	Examiner <b>A. Stashick</b>	Group Art Unit <b>3728</b>
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Invention: **REMOVABLE ROUNDED MIDSOLE STRUCTURES AND CHAMBERS WITH COMPUTER PROCESSOR-CONTROLLED VARIABLE PRESSURE**

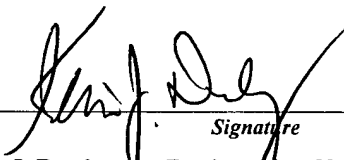
TO THE ASSISTANT COMMISSIONER FOR PATENTS:

Transmitted herewith in triplicate is the Appeal Brief in this application, with respect to the Notice of Appeal filed on

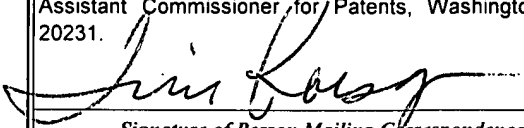
The fee for filing this Appeal Brief is: **\$320.00**

- ☒ A check in the amount of the fee is enclosed.
- ☐ The Commissioner has already been authorized to charge fees in this application to a Deposit Account. A duplicate copy of this sheet is enclosed.
- ☒ The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. **50-0462**.  
A duplicate copy of this sheet is enclosed.

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Dated: July 2, 2002

I certify that this document and fee is being deposited on <u>July 2, 2002</u> with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.
 <i>Signature of Person Mailing Correspondence</i>
<b>Iris Rousey</b> <i>Typed or Printed Name of Person Mailing Correspondence</i>

CC: